

Aviation Training Branch

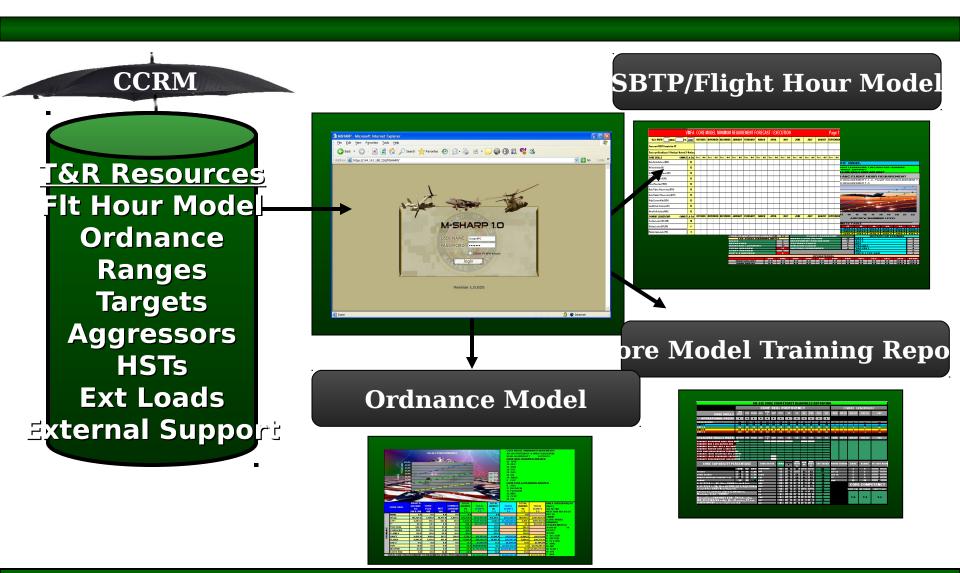
Commanders' Course

ore Competency Resource Mod Flight Hour Model

LtCol Pat Riley "Coach"
TECOM(ATB)
STANDARDS
AUTOMATED TRAINING
MANAGEMENT

UNCLASSIFIED

Preservation of Resources

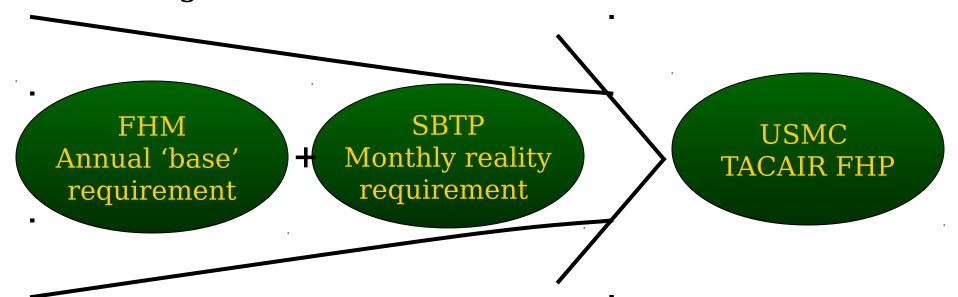




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Bottomline

- One piece of the CCRM puzzle
 - Annual sortie and flight hour requirement for maintenance of selected T-Level Readiness Ratings for an 'average peacetime' unit. Flight hour data VFR direct from T&R.



Core Competency Resource Model

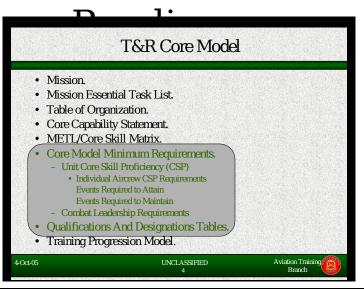
Flight Hour **Edition**

- Mission & Task
 - Analysis
- What does it provide?
- How does it work?
- Q&A

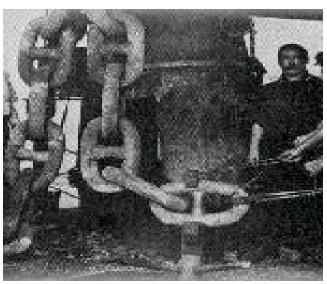


Mission

• Mission: With the T&R Core Model as the foundation, trace the training requirement from the bottom-up, in order to justify resources (Flight Hours) required to train a Core Competent Unit to a T 2.0 Level of



Chain of Traceability



Center of Gravity: T&R Core <u>Model</u>

- Mission.
- Mission Essential Task List.
- Table of Organization.
- Core Capability Statement.
- METL/Core Skill Matrix.
 - Core Model Minimum Requirements.
 - Unit Core Skill Proficiency (CSP)
 - Individual Aircrew CSP Requirements
 Events Required to Attain
 Events Required to Maintain
 - Combat Leadership Requirements
- Qualifications And Designations Tables.
- Training Progression Model.



Task Analysis

- Specified Task
 - Qualitative bottom up traceability
- Implied Task
 - Use T&R Core Model to estimate unit total annual flight hours required to:
 - build a Core Skill Proficient unit with requisite combat leadership
 - estimate H/C/M and S/C/M required for given T- Level of readiness
- Constraints & Restraints
 - account for training, support, and operational hours
 - provide a T-2.0 level of readiness over 12 month "snapshot"

Estimates TACAIR FHP budget requirement linked to T-2.0 Level of Readiness



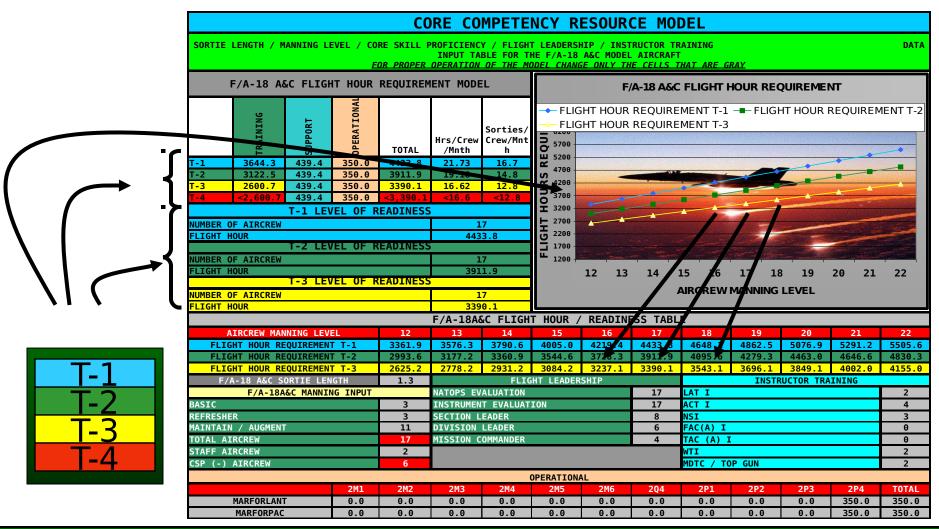
Core Competency Resource <u>Model</u>

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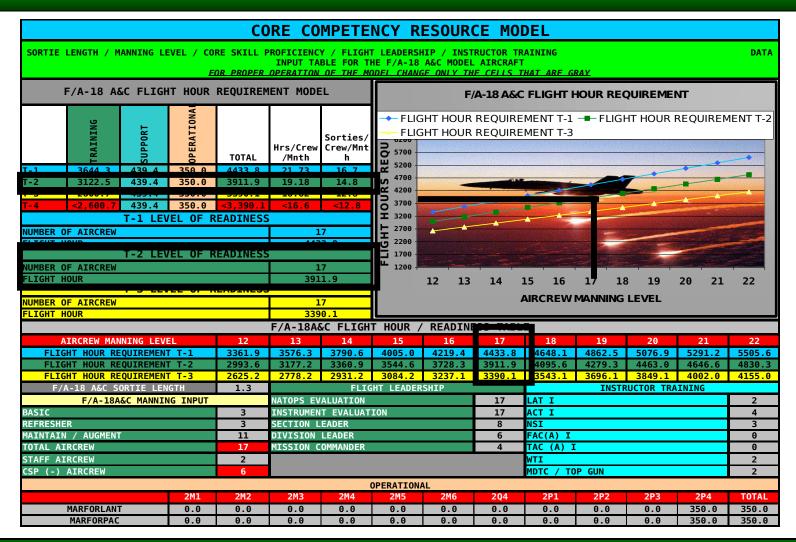


What does it provide?





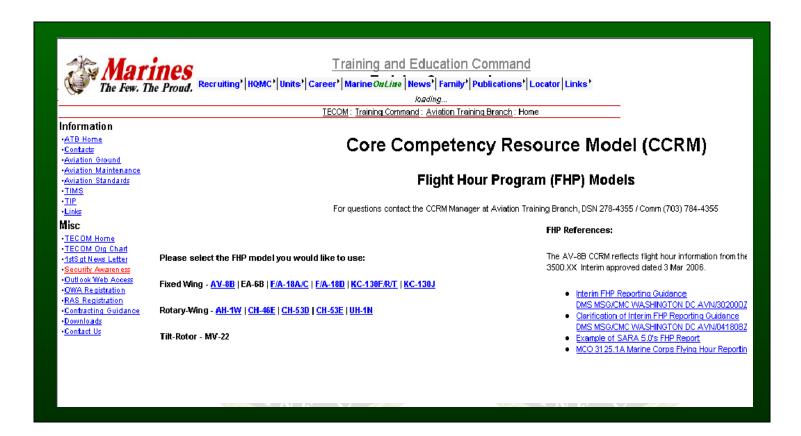
Differing Views of Same Data





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Where Can I View My Community FHM?



http://www.tecom.usmc.mil/atb/ccr



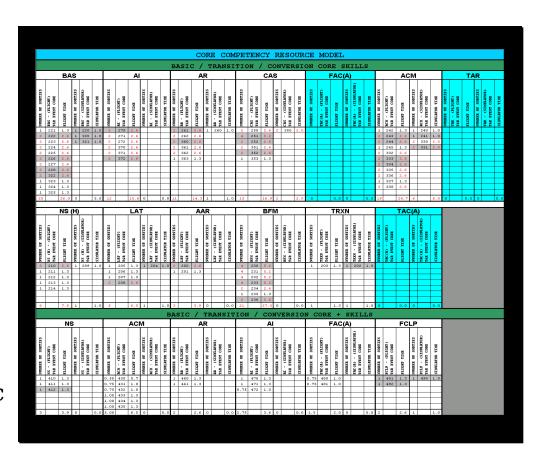
Core Competency Resource Model

Flight Hour Edition

- Mission & Task Analysis
- What does it provide?
- How does it work?
- Q&A

Concept of Ops

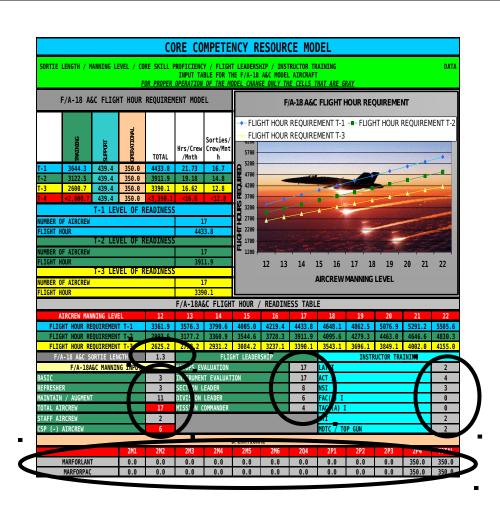
- T&R Program
 - Programs of Instruction
 - Phases, Stages,Events
 - T&R Core Model
 - CMMR Maintenance
 - Core Skill Proficiency
 - Combat Leadership
 - Instructors, Wpns, etc
 - T-LevelMeasurement





Constants & Variables

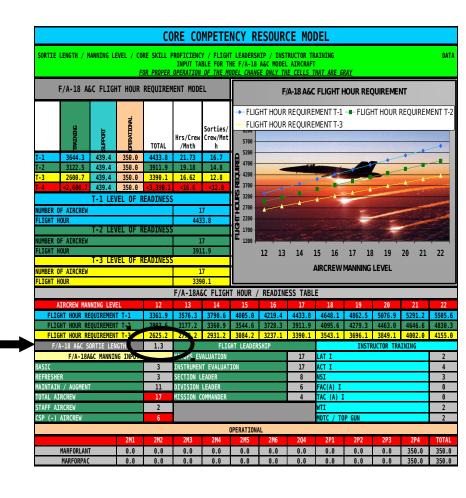
- Sortie Length
- Aircrew "Types"
- NATOPS & Instrument
- Flight Leadership
- Instructors
- Operational and Contingency Hours





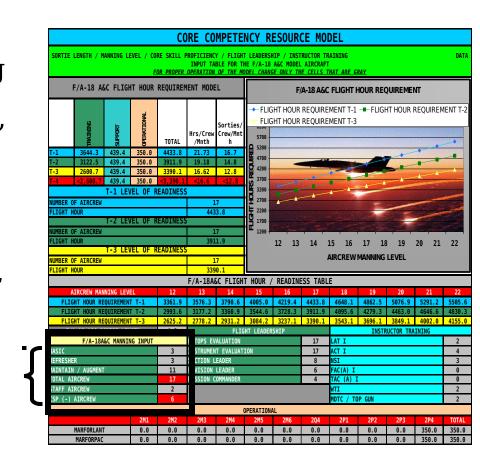
Sortie Length

 Key component to calculating overall CCRM estimate. Derived from historical execution data and approved by each community at the FHP conference.



Aircrew 'Types'

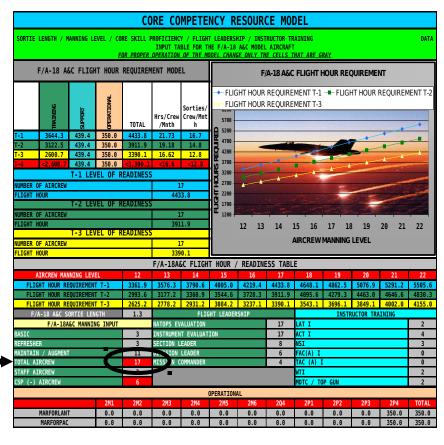
- Basic (POI) New pilot; entire T&R syllabus.
- Refresher (POI) Returning aircrew; R-Coded events
- Maintain CSP 'Post Basic' or Refresher POI; sorties denoted within the "Maintain CSP" table iot maintain CSP.
- Augment 'intent to deploy' exists; sorties denoted in the "Maintain CSP" table.
- Staff Aircrew in permanent staff positions funded at 120 hours per year.





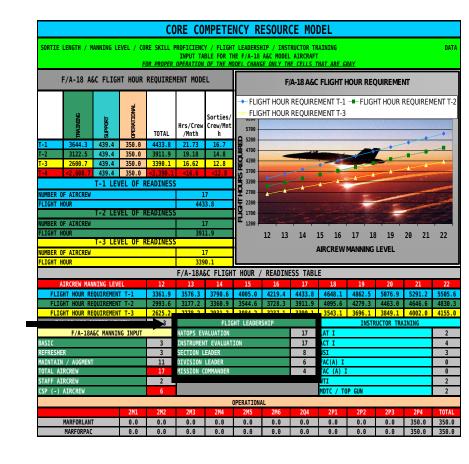
Total Aircrew

 Calculated by multiplying T/O by .90, giving what is termed Aircrew Manning Factor or 'staffing goal.' The mixture of "aircrew types" represents what a squadron would possess on average over a given 12 month period (1 Oct. through 30 Sep) and within a given 36 month timeframe (avg tour).



NATOPS; Instrument & Flight Leadership

F/A-1	.8A/C
NATOPS	10
INSTRUMENT	10
Combat Leadership	Squadron Pilots
Mission Commande	4
Division Leader	6
Section Leader	10

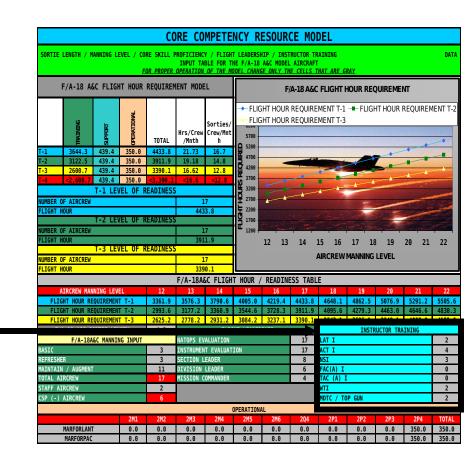


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Instructors

F/A-:	L8A/C
Designation	Instructors
LAT I	2
NSI	3
ACT I	4
WTI	2
LSO	3
MDTC/TOPGUN	2

 CMMR for instructors as stated in the T&R and WTTP.



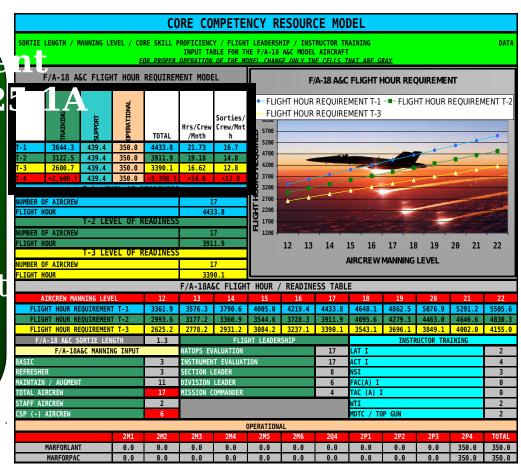


TTT

'Types' of Hours

Flight Hour Requirement by "type" iaw MCO 312

- Training
- Support
- Operational
- Total Requirement
- H/C/M
- •S/C/M





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Training Hours: Basic & Refresher POI

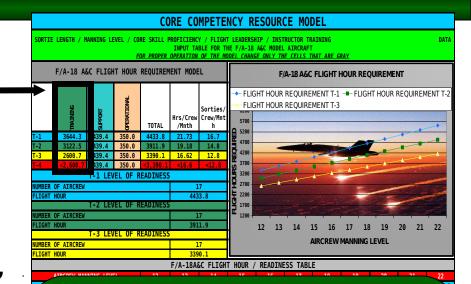
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Training Hours

Training Hours:

- "Includes all unit training in accordance with specific T&R Manuals, combat leadership, or instrument minimums."
- Includes 200, 300, 400,& 600 level T&R events.
- TMR Codes
 - 1A1 thru 1A9



- 1A2- Instrument Training
- ➤ 1A3- FCLP/CAL Training
- 1A4- CQ Training
- 1A5- Troop/Logistic insert extract Trainii
- ➤ 1A6- Air Combat Maneuvering Training
- > 1A7- Air to Ground Attack Training
- 1A8- Anti-Submarine/Surface Warfare Tr
- 1A9- Special Equipment(NVGs, FLIRS, seconds)



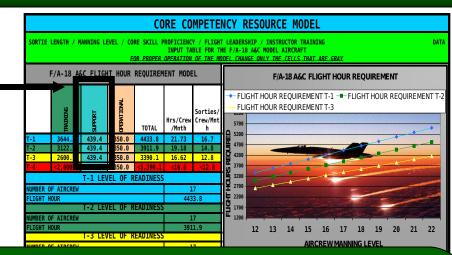
Support Hours: Inst & Combat Leadership

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Support Hours

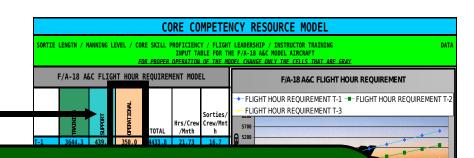
- "Includes all squadron-generated sorties that do not fit the criteria for training and are not specifically tasked an outside command or agency."
 - Includes 500 level training



- > 1B1-1B0: Instructor training
- ►2K1-2K2: FCF's
- >2L5: FCP under training
- >2K4-2K6: Adversary sorties when no T&R credit
- 2J1-2J2: Ferry, non-training cross country or adn
- ► 2Q5: Squadron logistics flights
- ►2Q5: Maintenance recovery flights
- ▶2L3-2L4: NATOPS and instrument check flight
- >2L0: Other squadron generated support flights

Operational Hours

 "Includes all sorties specifically tasked by commands outside of the squadron when aircrew T&R credit is not being received."



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- ►2M1: Supporting another unit from the same MAG
- ►2M2: Supporting USMC aviation units outside of parent MAG
- ►2M3: Supporting a Marine Corps Base or station
- ►2M4: Providing MAGTF (MEF, MEB, MEU,

SPMAGTF) support

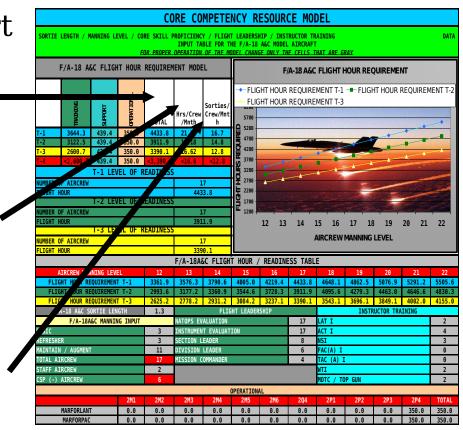
- ► 2M5: Supporting formal USMC/USN schools or training courses
- ▶2M6: Other support to any agency not mentioned above
- ►2Q4: Air show, demonstration or static display.
- ►2P1-2P4: SAR/MEDEVAC flights



25 Mar

CCRM Estimate of Requirement

- Total of all Training, Support and Operational Hours for a unit to maintain a given T Level of readiness.
- Hour/Crew/Month- The average H/C/M an aircrew will fly if unit funded to a given T-Level. H/C/M includes training, support and operational hours.
- Sorties/Crew/Month- The average S/C/M an aircrew will fly if unit is funded to a given T-Level.





Accounting for an Imperfect World

CORE COMPETENCY RESOURCE MODEL

- 1. Information for the Core Competency Resource Model (CCRM) is taken from the specific Type/Model/Series (T/M/S) Training and Readiness (T&R) Manuals (MCO 5000 series), MAWTS-1 Course Catalog, T/M/S NATOPS and OPNAVINST 3710.
- Additional resource material is the WTTP for WTI information.
- 3. The POIs (Programs of Instruction) for all T/M/S include: Basic, Transition, Conversion and Refresher. Unique POIs to the KC-130J and CH-53 community; series conversion.
- 4. Core skill requirement derived from T&R Core Model Minimum Requirement derived by each community. Normally it included all the 200 and 300 level T&R events. The exception would be the movement of some previous Core Skills to CORE+. An example would be FCLPs and CQs (this was determined by the Subject Matter Experts at the conferences held in Jan and Feb 2004.
- 5. The Attain POI was derived from the Sorties Required to Attain Individual CORE Skill Competency table in the beginning of each T&R manual.
- 6. The Maintain POI was derived from the Sorties Required to Maintain Individual CORE Skill Competency table in the beginning of each T&R manual.
- 7. The BASIC POI was utilized for the following category of Pilots; Basic, Conversion, Transition, and Attain.
- The Flight Leadership and Instructor designations were obtained from the MAWTS-1 Course Catalog and 500 level events within the T&R.
- 9. RQD events derived from 600 level events within the T&R.
- 10. The Refly interval of events was derived from the T&R tables in the back of the T&R manuals.
- 11. The CSP FHP (Core Skill Proficiency Flight Hour Model) table is the total of all Training T&R events contained in the various POIs (Basic, Refresher, Attain, Maintain).
- 12. The Flight Leadership table is the total of all RQD, Instructor, and Flight Leadership programs of instruction / qualification / designation.
- 13. Flight Leadership and Instructor Designations / Qualifications was obtained from the Unit Flight Leader / Instructor Requirements.
- 14. Manning level of 90% of Table of Organization (T/O) was utilized for all models.
- 15. That the refly factor is computed in the B/T/C POI.
- 16. That the Attain skills table is not utilized in the computations since all B/T/C's fly the B/T/C POI and the attain table is a subset of the B/T/C POI.



Accounting for an Imperfect World

- 17. That all Refreshers fly the Refresher POI.
- 18. That the refly factor is computed in R-coded events.
- 19. That all "old guys" are required to maintain Core Skill proficiency. (Refly interval is included in the computations.)
- 20. Operational estimates were obtained from HQMC (APP).
- 21. That augment aircrew fly sorties within the "Maintain CSP" table. Note: Refly factor is computed in the maintain table.
- 22. That the "Training Factor" factor of 1.2 includes the following items:
 - Multiple aircraft flights reflected in both 19 & 20 above (Training inefficiencies).
 - Refly overlap to maintain Core Skill Proficiency.
 - Weather cancellations.
 - Post Maintenance Check Flights.
 - External support cancellations (Range, etc.)
 - Maintenance cancellations.
 - Ordnance cancellations.
 - CORE Skill Proficiency Refly (unsatisfactory training events).
 - Instructor Factor (non availability of Flight Leadership).
 - Transit.
 - Ferry.
 - Incomplete events.
- 23. That all B/T/C's arrive simultaneously at the beginning of the FY.
- 24. That "Old Guys" are Core Skill proficient across all Core Skills and must maintain proficiency through refly interval.
- 25. That perfect scheduling is conducted with regards to refly interval.
- 26. That all Instructors are rebuilt each year.
- 27. That all Flight Leaders all rebuilt each year.
- 28. Multiple A/C events are accounted for.
- 29. That CSP(-) aircrew equals the number of aircrew those checks out or are lost throughout the year.
- 30. That CSP(-) is equal to the number of Basics and Refreshers.
- 31. That aircrew out equals aircrew in.
- 32. That staff aircrew fly 100 hours per month.



Core Competency Resource <u>Model</u>

Flight Hour Edition

- Mission & Task Analysis
- What does it provide?
- How does it work?
- Q&A





Aviation Training Branch





LtCol Pat Riley "Coach" DSN 278-4053

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Aviation Training Branch

Commanders' Course Back-ups

ore Competency Resource Mod Flight Hour Model

LtCol Pat Riley "Coach"
TECOM(ATB)
STANDARDS
AUTOMATED TRAINING
MANAGEMENT

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FHP reporting

- Goal:
 - To accurately track flight hour execution by Training, Operational, and Support Category.
 - Current codes don't adequately cover all of Marine Aviation.

- Training:

- Includes all unit training in accordance with specific T&R manuals (Initial, or currency/proficiency refly), flight leadership, instrument minimum training.
- Codes: 1A1- FAM/FORM/NAV Training
 - » 1A2- Instrument Training
 - » 1A3- FCLP/CAL Training
 - » 1A4- CQ Training
 - » 1A5- Troop/Logistic insert extract Training
 - » 1A6- Air Combat Maneuvering Training
 - » 1A7- Air to Ground Attack Training
 - » 1A8- Anti-Submarine/Surface Warfare Training
 - » 1A9- Special Equipment Training (NVGs, FLIRS, special sensors)

• Training cont:

- Combat leadership Section leader/Division leader/Flight leader (600 level flight that are linked to lower level codes).
- FRAGS in support of the MAGTF to include support of exercises such as CAX, Desert Knight, MEU (SOC) work-ups etc., where the aircrew are able to log a valid T&R code, either initial or refly.

• Support:

- Includes all squadron-generated sorties that do not fit the criteria for training that are not specifically tasked by an outside command or agency.
- Cancellation/Abort: any training flight that is aborted in-flight or is incomplete for any reason shall be logged as a support flight utilizing the appropriate TMR (cancellation/abort) code.

1B1-1B0: Instructor training

2K1-2K2: FCF's

2L5: FCP under training

2K4-2K6: Adversary sorties when no T&R credit is gained

2J1-2J2: Ferry, non-training cross country or admin transit

2Q5: Squadron logistics flights

2Q5: Maintenance recovery flights

2L3-2L4: NATOPS and instrument check flight

2L0: Other squadron generated support flights

Operational:

- Includes all specifically tasked by commands outside the squadron when aircrew T&R credit is not being received.
 - Codes: 2M1: Supporting another unit from the same MAG
 - 2M2: Supporting USMC aviation units outside of parent MAG
 - 2M3: Supporting a Marine Corps Base or station
 - 2M4: Providing MAGTF (MEF, MEB, MEU, SPMAGTF) support
 - 2M5: Supporting formal USMC/USN schools or training
 - courses
 - 2M6: Other support to any agency not mentioned above
 - 2Q4: Air show, demonstration or static display.
 - 2P1-2P4: SAR/MEDEVAC flights

• Contingency:

- All sorties flown in support of a designated contingency
 - Codes: 2R4 Troop lift into, out of, or over, an area where enemy fire is received or can reasonably be expected.

2R5 Liaison flight (includes visual reconnaissance) into, out of, or over an area where enemy fire is received or can be reasonably be expected.

2R6 Logistics flight into, out of, or over an area where enemy fire is received or can be reasonably expected.

Simulator Hours:

 All simulator hours must be entered into NALCOMIS, and logged as flights with regards to TMR codes. This enables more accurate data tracking of actual training conducted in the simulator.